HONDA ServiceNews April 2005

Cold Air Intake Systems and Low-Restriction Air Filters: A Word to the Wise

Cold air intake systems and low-restriction air filters are hot aftermarket accessories. Popular among the import tuner crowd, these items may improve engine performance by letting the engine breathe more deeply, reducing the intake air temperature, and cutting down on weight. And for that all-important sound when you wind up the engine, cold air intake systems help produce a deep, throaty tone.

Stock air intake systems are designed to clean the intake air, minimize intake noise, and keep water from getting into the intake tract, all the while putting out the most horsepower and torque.

Although cold air intake systems and low-restriction air filters kick up engine performance a notch, they also have their dark side. They can really mess up the engine, and that's not covered by warranty!

With cold air intake systems, you run the risk of engine damage from hydrolocking if you drive in wet weather or plow through standing water. These systems are usually designed to draw air from the bottom of the engine compartment or from the front of the radiator where the air is cold and dense. The air filter used in these systems doesn't sit in an air box, so water that gets sucked into the filter gets sucked right into the engine.

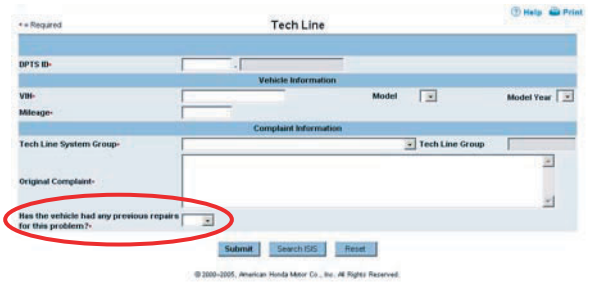
When enough water gets into the engine, the piston can't fully compress the air/fuel mixture (water doesn't compress) so it stops before reaching top dead center (TDC). Even though the piston stops, the crankshaft just keeps turning from inertia. As a result, the connecting rod bends and gets shorter. With each compression and power stroke, the connecting rod flexes until it eventually fails from metal fatigue.

With low-restriction air filters, you run the risk of premature engine wear and contamination. Some of these filters just don't work as well as stock air filters do. Microscopic debris can get past the filter, causing premature wear of the pistons, piston rings, cylinders, and valves. It can also foul up the throttle body and the components of the intake manifold runner control (IMRC), intake manifold tuning (IMT), and idle air control (IAC) systems.

So what's the bottom line here? Tell your customers they're taking a really big risk if they run the vehicle with a cold air intake system or a low-restriction air filter. Engine damage caused by these items isn't covered by warranty, and that could take a big bite out of their pocketbook.

New Field Added to Tech Line Screen on *i*N

We've recently tweaked the **Tech Line** screen that comes up on the *i*N when you need to contact a Tech Line specialist. We've added the question **Has the vehicle had any previous repairs for this problem?** right below the **Original Complaint** field.



We've added this field to help improve communication between your dealership and the Tech Line Specialist. It lets you answer the first question you'd normally be asked by the Tech Line Specialist to help understand the problem.

Entering the part name and procedures that have already been done cuts down on the time it takes Tech Line to understand your problem and improves the quality of the info you get from them.

Reman A/T Speed Sensor Broken? Send the A/T Back

No matter how well it's packed, a reman A/T sometimes gets damaged in shipping. If the reman A/T you're installing came with a broken speed sensor, just pack up the A/T and send it back for another one. But if your customer wants the vehicle pronto, go ahead and replace the broken sensor.

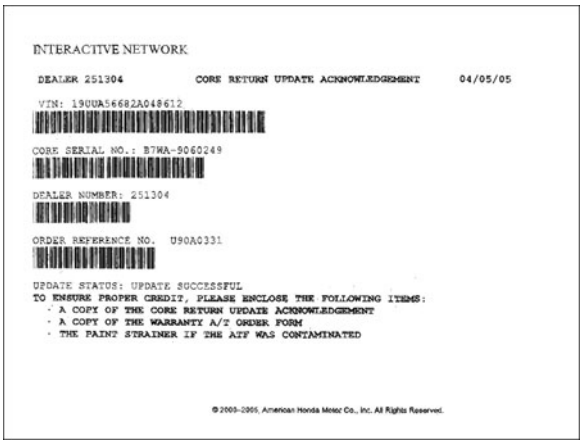
If you're replacing the speed sensor, check if it's got a spacer (some speed sensors do). If it does, make sure you install the spacer with the new sensor. If you forget to do this, the sensor will get damaged by the differential gear.

Returning a Failed A/T Core? Use *New* Core Return Form

Returning a failed A/T core to the reman center? Make sure you're using the Core Return Update Acknowledge form that's on the *i*N. *Don't* use the three-part (white, yellow, pink) Automatic Transmission Core Return Form, even if it came with the reman A/T. That form is now history.

To get yourself a copy of the Core Return Update Acknowledgement, do this:

1. From the *i*N main menu, click on **PARTS**.
2. Click on **Returns and Surplus**.
3. Click on **Warranty A/T Core Return**.
4. Click on the appropriate VIN to bring up the **Update Core Return Information** screen.
5. Enter the A/T core serial number, then click on **Submit** to bring up the Core Return Update Acknowledgement.


INTERACTIVE NETWORK

DEALER 251304 CORE RETURN UPDATE ACKNOWLEDGEMENT 04/05/05

VIN: 19UUA56682A048612

CORE SERIAL NO.: B7WA-9060249

DEALER NUMBER: 251304

ORDER REFERENCE NO. U90A0331

UPDATE STATUS: UPDATE SUCCESSFUL
TO ENSURE PROPER CREDIT, PLEASE ENCLOSE THE FOLLOWING ITEMS:
- A COPY OF THE CORE RETURN UPDATE ACKNOWLEDGEMENT
- A COPY OF THE WARRANTY A/T ORDER FORM
- THE PAINT STRAINER IF THE ATF WAS CONTAMINATED

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6. Make sure you've got the printer set to portrait mode (not landscape). Print out a copy by clicking on the printer icon.

Make sure both the Warranty Automatic Transmission Order form and the Core Return Update Acknowledgement match the failed A/T core you're returning. The info on these forms is critical to the remanufacturing process. If you return a failed A/T core without the right paperwork, your dealership could be dinged with a **$50.00** service charge.

For a complete description of the A/T core return process, refer to S/B 98-061, *Automatic Transmission In-Warranty Exchange Program*. Also, check out the article "Warranty A/T Core Return Procedure Changed" in the July '04 issue of *ServiceNews*.

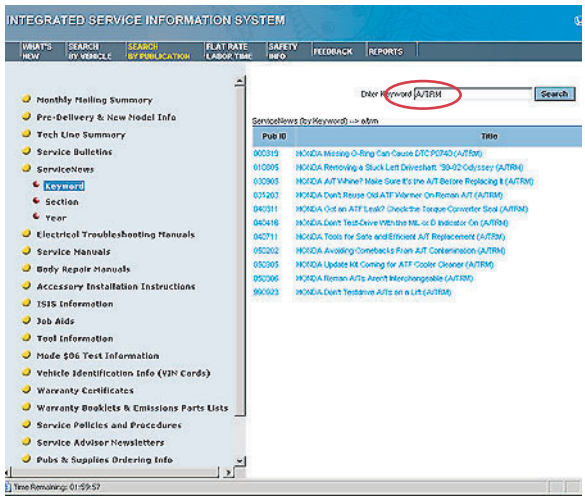
Drain ATF Before Returning Failed A/T Cores

When returning a failed A/T core to the reman center, make sure you drain all the ATF from the A/T and the torque converter before you pack everything up and ship it. Here's why:

- The shipper could reject your shipment if the shipping container is wet or it's leaking ATF.
- Leaking ATF is hazardous for many folks involved in the shipping process.
- Paperwork soaked with ATF is just about impossible to read. If the reman center folks can't read your paperwork, your dealership could be dinged with a **$50.00** service charge.

Need A/T Diagnosis & Repair Info Fast? Just Type "A/TRM"

Got a vehicle with a sick A/T and you need *ServiceNews* diagnosis and repair info pronto? Here's a new, cool feature we've just added to ISIS that will make short work of it. In ISIS, click on **SEARCH BY PUBLICATION**, **ServiceNews**, and **Keyword**. Then type **A/TRM** in the **Enter Keyword** box, and click **Search**. You'll get a list of about a dozen *ServiceNews* articles specifically about A/T diagnosis and repair.



These articles, collected from past issues of *ServiceNews*, represent the best available info we've got to help you effectively diagnose and repair Honda A/Ts. Each month we'll take a look at this list and we'll remove articles and add new ones as needed. So, the next time you've got a sick A/T to fix, just remember **A/TRM**!

Keep Torque Converter on Mainshaft to Avoid Damage

We can't emphasize enough how important it is to keep the torque converter in place when you're handling or installing a reman A/T. If the torque converter slips off the mainshaft, and you don't put it back on the shaft exactly right, you could cut the O-ring. This could result in loss of lock-up control and ATF leakage.

Hissing Between 30 and 50 mph

Got a '03–05 Pilot in your shop that hisses between 30 and 50 mph? Check for a bad propeller shaft center support bearing. If the bearing is bad, you'll get this noise. A lot of times it's mistaken for wind noise.

To check the center support bearing, remove the propeller shaft (see the Driveline/Axle section of the appropriate Pilot S/M). (Online, enter the keyword **PROP**, and select **Propeller Shaft Removal** from the list.) Now, test-drive the vehicle. If the noise goes away, you've got a bad bearing. You'll need to replace the propeller shaft. If you can hear the noise during your test-drive, press on with normal troubleshooting.

When you're installing the new propeller shaft, make sure you line up the reference marks on the ends of the shaft with the marks on the transfer assembly and differential flanges. See the Driveline/Axle section of the appropriate Pilot S/M for details. (Online, enter the keyword **PROP** again, and select **Propeller Shaft Installation** from the list.)

MAF Sensor Value Wrong With Generic Scan Tool

Troubleshooting a '03–05 Accord L4 with a generic scan tool? Here's something you need to know: A glitch in the PCM software causes a wrong output value for the mass air flow (MAF) sensor. To fix this problem, you need to update the PCM. Refer to S/B 01-023, *Updating Control Units/Modules*, for details.

Gauge Control Module Display Says "Not Available"

If you're using the HDS to troubleshoot a B-CAN problem in a '06 Ridgeline, some early production gauge assemblies can't report communication status or error codes. If you're running the HDS Connected Unit Test, you'll see the error message **Not Available** on the gauge control module display. You won't see any DTCs but you might think the problem is a bad multiplex integrated control unit (MICU) or gauge control module. This error message can also mask gauge control module DTCs when there really is a problem.

If you get this error message, manually check for DTCs by using the MPCS service connector to jump the multiplex control inspection connector socket that's on the back of the MICU. You can then read DTCs on the display. With the socket jumped, you can scroll through all B-CAN DTCs. To clear these DTCs, just press and hold the **SELECT** button for **13 seconds**.

You can also do a communication line check with the gauge control module. For details, enter online the keyword **GAUGE**, and select **How to Troubleshoot the Gauges and Indicators** from the list.

O/M Error Alert: Auto Door Unlock, '06 Ridgeline

There's an error on pages 83 and 84 of the 2006 Ridgeline O/M 1st edition (version 14000.2005.01.6). It says you can set the auto door unlock feature to unlock all the doors. This isn't true; the auto unlock feature can only unlock the driver's door and enable the trunk release button. All future editions of the O/M will be revised.

When you deliver your customer's vehicle, set the custom door lock/unlock feature for him or her so there's no confusion. To set the auto lock feature, refer to the 2006 Ridgeline Quick Start Guide.

Here's a handy chart to help you and your customer remember what settings are available:

Auto Door Lock Settings	Auto Door Unlock Settings
Shift lever moved out of Park	Ignition switch turned to LOCK (0)
Vehicle speed reaches 9 mph (factory default)	Shift lever moved to Park (factory default)
Deactivated	Deactivated

Rear Wiper Sweeps When Shifting Into Reverse Is OK

Here's something that's not mentioned in any of the '05 Odyssey glove box materials: If you've got the front windshield wipers on (in any position) and you shift into Reverse, the rear wiper starts sweeping and keeps sweeping until you move the shift lever out of Reverse. This feature was added to give the driver a clear rearward view when backing up.

Scratches Around Shift Lock Release Slot

We've gotten a number of warranty claims for scratches around the shift lock release slot on '03–05 Accords with A/T. If you need to use the shift lock release, be really careful when you insert the ignition key into the slot. The acrylic surface of the A/T gear position indicator panel can be easily scratched or marred if you miss the slot.

New Software for HDS: Version 1.017.006

During the week of April 11, 2005, all Honda dealerships were sent a new CD containing HDS software version 1.017.006. This new CD sports a dark green label that reads "Honda Diagnostic System Installation Disk (VER 1.017.006), April 2005." Your system administrator should have this software already loaded onto the master server.

Here's some important info on 1.017.006:

- It includes software that turns an ordinary PC or laptop that's configured as an *i*N workstation into an HDS.
- It includes Generic OBD II mode for the HDS Pocket Tester.
- The VIN entry screen now shows up to 10 previous VINs; this shortens processing time.
- The CKP pattern clear function has been improved.
- The processing time from the VIN screen to the **Systems Menu** has been shortened.

New Body Panel Gap Gauge Coming Soon

Need to know the size of a body panel gap? The Body Panel Gap Gauge (T/N 07AAJ-SJAA100) is just the ticket for measuring it. It's a required special tool and it's coming your way in a packet of five.

This cool, pocket-size tool is molded in bright, yellow plastic and it's calibrated on each end in millimeters. One end goes from **1 to 12 mm**; the other end goes from **5 to 12 mm**. This tool is a real snap to use. Just stick the tapered end into the gap you want to measure, and read what's on the scale. This tool also works great as a visual indicator on photos you send to Tech Line.

Engine Falters, No Power, Won't Rev Over 7,000 RPM

To protect the engine in a '00–05 S2000 from wear and damage, the ECM limits the engine speed to **7,000 rpm** until the engine coolant reaches its normal operating temperature. This is the same fuel cutoff function that prevents damage if you red-line the engine. There's nothing you can do to change it; it's just a design characteristic of the S2000.

S/M Fix: VTM-4 Differential Fluid, '05 Pilot

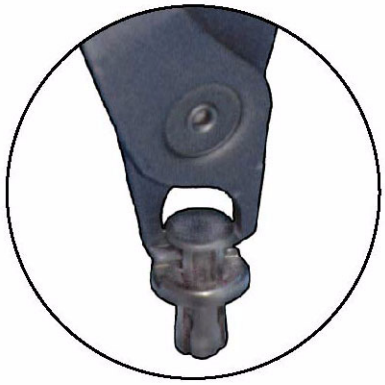
You need to fix page 15-45 of the 2005 Pilot S/M. It lists the wrong P/N for the VTM-4 Differential Fluid. The correct P/N is **08200-9003**. Mark up your copies of the S/M to reflect this change.

Tips for Removing Plastic Body Clips

Honda vehicles use plastic body clips to attach inner fenders, bumpers, and other plastic components. When these clips get covered with dirt or road grime, they're a real bear to remove and can easily break, especially if you're using a screwdriver. Here are a couple of tips to make short work of it:

- ***Use Honda Multi-Lube Rust Penetrant (P/N 08732-0003, H/C 2962629).*** Just spray a shot onto the top of the clip. The spray lubricates the plastic so the clip pops out more easily with less chance of breaking.

- ***Use Push Pin Puller (T/N 07AAC-SJAA100).*** This new required special tool was specially made for American Honda to remove plastic body clips without damaging them. Just position the tool's jaws on the two indents in the clip's head, and squeeze the handle. The tool releases the clip's inner plunger, letting you easily remove the clip. All Honda dealers are being sent two of these push pin pullers. Order more of these pullers through normal parts ordering channels.



AUTOMOTIVE Youth Educational Systems YES ®

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